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EXAMINER	
ODLAND, DAVID E	
ART UNIT	**PAPER NUMBER**
2662	13

DATE MAILED: 09/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/291,798	SOLUM, JEFF	
	Examiner	Art Unit	
	David Odland	2662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 July 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-6,8-17 and 19-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-6,8-17 and 19-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Response to Amendment

1. The following is a response to the amendments filed on 12/20/2002.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 26 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Medendorp (USPN 5,764,734), hereafter referred to as Medendorp.

Referring to claim 26, Medendorp discloses a method for controlling power consumption in a remote communication device in signal communication with a head end communication device (a power management method in a system with a CCU (headend) and a CAU (remote device) (see figure 1)), the method comprising:

setting a power down timer for the remote communication device to time a predetermined power down period (power to a transceiver is turned off for the duration of a sleep timer that is inherently started (see column 5 lines 23-37 and figure 8));

Medendorp does not disclose that the powering up of the portion of the receiver comprises powering up in time to allow detection of an attempted retransmission of a packet. However, it would have been obvious to one skilled in the art at the time of the invention to power up the receiver of Medendorp in enough time to detect retransmissions because doing so would allow

for proper communication with the source (i.e. if the receiver does not have time to detect retransmissions then communications with the source would not take place and the system would not operate properly).

Referring to claim 28, Medendorp discloses the system as discussed above. Furthermore, Medendorp discloses that the retransmission of data comprises a data packet (the data is transmitted as alert phases and information blocks (see figures 6 and 7)).

4. Claims 1,3,5,20 and 22, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Medendorp in view of U.S. Patent number 6,151,334 to Kim et al., hereafter referred to as Kim.

Referring to claim 1, Medendorp discloses a method for controlling power consumption in a device (a method for controlling power consumption (see abstract)), comprising powering down at least a portion of a receiver of the communication device for a selected period of time (power to a transceiver is turned off for the duration of a sleep timer (see column 5 lines 23-37 and figure 8)), when the selected period of time expires, powering up at least a portion of the receiver to detect and receive incoming data packets when incoming data is detected (after the sleep timer equals zero the transceiver is powered up and checks for and receives data related to an incoming telephone call (see column 5 lines 23-37 and figure 8)).
Medendorp does not disclose that the portion of the receiver is powered down in response to an indication from the source that data transmission has ended. However, Kim discloses of a system wherein a receiver powers down when it receives a particular code word from the transmitter which indicates the end of the data transmission (see column 7 lines 3-8)). It would

have been obvious to one skilled in the art at the time of the invention to power down the receiver when the source sends it an indication that data transmission has ended, as taught by Kim, in the system of Medendorp because doing so would prevent wasting power (i.e. since the transmission of data has ended there is no need for the receiver to remain fully powered). Medendorp also does not disclose that the powering up of the portion of the receiver comprises powering up in time to allow detection of an attempted retransmission of a packet. However, it would have been obvious to one skilled in the art at the time of the invention to power up the receiver of Medendorp for enough time to detect retransmissions because doing so would allow for proper communication with the source (i.e. if the receiver does not have enough time to detect retransmissions then communications with the source would not take place and the system would not operate properly).

Referring to claim 3, Medendorp discloses the method of controlling power consumption as discussed above. Furthermore, Medendorp discloses powering down the at least a portion of a receiver for a selected period of time comprises setting and decrementing a counter (the transceiver is powered off until the sleep timer counts down to zero (see column 5 lines 23-37 and figure 8)).

Referring to claim 5, Medendorp discloses controlling power consumption as discussed above. Furthermore, Medendorp discloses powering up the receiver checking for incoming data (powering on the transceiver and checked for the alert frame (see column 5 lines 23-37 and figure 8)), when no data is detected, checking for incoming data after another selected period of time (if the alert value has not been received, the transceiver powers down again for the duration of a timer and then powers up and checks for data again after the timer expires (see column 5

lines 23-37 and figure 8)), when incoming data is detected, processing the data (when a call is received the call is processed (see column 5 lines 23-37 and figure 8)), when no incoming data is detected, powering down the receiver for a selected period of time (if the alert frame is not received the timer is reset and the transceiver is powered off (see column 5 lines 23-37 and figure 8)).

Referring to claim 20, Medendorp discloses a method of power management in a system including a head end and at least one remote communications device (a power management method in a system with a CCU (headend) and a CAU (remote device) (see figure 1)) comprising:

setting a counter at a remote unit to a predetermined power down period (the transceiver is powered off until the sleep timer counts down to zero (see column 5 lines 23-37 and figure 8));

checking for an incoming transmission after the power down period has expired (after the sleep timer equals zero the transceiver is powered up and checks for and receives data related to an incoming telephone call (see column 5 lines 23-37 and figure 8));

if no incoming transmission is received, resetting the counter to the predetermined power down period (if the alert frame is not received the timer is reset and the transceiver is powered off (see column 5 lines 23-37 and figure 8)).

Medendorp does not disclose that if an incoming transmission is received the counter is reset in response to an indication from the source that data transmission has ended. However, Kim discloses of a system wherein a receiver powers down when it receives a particular code word from the transmitter which indicates the end of the data transmission (see column 7 lines 3-8)). It would have been obvious to one skilled in the art at the time of the invention to reset the timer

of Medendorp when the source sends it an indication that data transmission has ended, as taught by Kim, because doing so would prevent wasting power (i.e. since the transmission of data has ended there is no need for the receiver to remain fully powered).

Referring to claim 22, Medendorp discloses controlling power consumption as discussed above. Medendorp does not disclose that the powering down of the portion of the receiver is timed to allow for the power up and detection of the retransmission of data from the head end. However, it would have been obvious to one skilled in the art at the time of the invention to time the power down period so that the receiver can power up in time to detect retransmissions, in the system of Medendorp, because doing so would allow for proper communication with the source (i.e. if the receiver did not power up in enough time to detect retransmissions then communication with the source would not take place and the system would not operate properly).

5. Claims 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Medendorp in view of U.S. Patent number 5,392,287 to Tiedemann et al, hereafter referred to as Tiedemann.

Referring to claim 24, Medendorp discloses a method for controlling power consumption in a remote communication device in signal communication with a head end communication device (a power management method in a system with a CCU and a CAU (see figure 1)), the method comprising:

starting a counter for the remote communication device to time a predetermined power down period (power to a transceiver is turned off for the duration of a sleep timer that is inherently started (see column 5 lines 23-37 and figure 8));

powering down the remote communication device for the predetermined power down period (power to a transceiver is turned off for the duration of a sleep timer (see column 5 lines 23-37 and figure 8));

powering up the remote communication device to check for any incoming data (after the sleep timer equals zero the transceiver is powered up and checks for and receives data related to an incoming telephone call (see column 5 lines 23-37 and figure 8)).

Medendorp does not disclose starting a counter at the head end to the same time as the power down period of the remote device, thus synchronizing with the remote device. However, Tiedemann discloses synchronizing a receiver with that of the transmitter to which it is connected (see column 4 lines 17-33)). It would have been obvious to one skilled in the art at the time of the invention to perform the synchronization between the source and receiver timers, as taught by Tiedemann, in the system of Medendorp because doing so would prevent timing problems and possible loss of data (i.e. the source would know when the receiver was powered down or not and therefore it would know when the proper time would be to transmit data to the receiver).

Medendorp also does not disclose that the counter in the head end is started at the completion of data transmission to the remote device. However, it would have been obvious to one skilled in the art at the time of the invention to start the counter of the head end after completion of the transmission of data to the remote device because doing so would properly synchronize the

headend and remote device counters, thereby allowing for properly timed communication between the headend and remote device.

Referring to claim 25, Medendorp discloses a method for controlling power consumption in a remote communication device in signal communication with a head end communication device (a power management method in a system with a CCU and a CAU (see figure 1)), the method comprising:

starting a counter for the remote communication device to time a predetermined power down period (power to a transceiver is turned off for the duration of a sleep timer that is inherently started (see column 5 lines 23-37 and figure 8));

Medendorp does not disclose starting a counter at the head end to a time the same as the power down period of the remote device, thus synchronizing with the remote device. However, Tiedemann discloses synchronizing a receiver with that of the transmitter to which it is connected (see column 4 lines 17-33)). It would have been obvious to one skilled in the art at the time of the invention to perform the synchronization between the source and receiver timers, as taught by Tiedemann, in the system of Medendorp because doing so would prevent timing problems and possible loss of data (i.e. the source would know when the receiver was powered down or not and therefore it would know when the proper time would be to transmit data to the receiver).

Medendorp also does not disclose that the counter in the head end is started at the completion of data transmission to the remote device. However, it would have been obvious to one skilled in the art at the time of the invention to start the counter of the head end after completion of the transmission of data to the remote device because doing so would properly synchronize the

headend and remote device counters, thereby allowing for properly timed communication between the headend and remote device.

6. Claims 17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Medendorp in view of Stifle et al. (USPN 4,633,462), hereafter referred to as Stifle.

Referring to claim 17, Medendorp discloses a power control circuit for a communication device (a method and apparatus for controlling power consumption (see abstract)) comprised of a counter that establishes a selected time period for powering down a receiver of the communication device (power to a transceiver is turned off for the duration of a sleep timer (see column 5 lines 23-37 and figure 5)) and a processor coupled to the counter (the timer is within a microprocessor (see column 5 lines 23-37, claim 15 and figure 5)), that is programmed to control the reset of the counter, to power down the receiver, and to power up the receiver to check for incoming data packets transmitted by another communication device when the counter indicates that the selected time period has expired (the microprocessor controls the timer so that the transceiver is powered down until the sleep timer expires and then powered up to check for incoming alert frames from the transmitter (see column 5 lines 23-37, claim 15 and figures 5 and 1)). Note the timer is inherently reset since the power saving feature disclosed in Medendorp is an on-going repetitive process.

Medendorp does not disclose that the powering up of the portion of the receiver comprises powering up in time to allow detection of an attempted retransmission of a packet. However, it would have been obvious to one skilled in the art at the time of the invention to power up the receiver of Medendorp for enough time to detect retransmissions because doing so would allow

for proper communication with the source (i.e. if the receiver does not have enough time to detect retransmissions then communications with the source would not take place and the system would not operate properly).

Medendorp also does not disclose that the head end retransmits packets when no acknowledgment is received. However, Stifle discloses of a system wherein when a head end does not receive acknowledgments it retransmits the data (see column 10 lines 19-26)). It would have been obvious to one skilled in the art at the time of the invention to implement, in the system of Medendorp, a protocol of retransmitting packets that are not acknowledged, as taught in the system of Stifle, because such a protocol would allow data that might be lost or corrupted during transmission (and therefore not acknowledged) to be retransmitted to the destination, thereby increasing the reliability of the system of Medendorp.

Referring to claim 19, Medendorp discloses controlling power consumption as discussed above. Furthermore, Medendorp discloses that the processor is programmed to power up the receiver for a selected time period to check for incoming data (the microprocessor powers up the receiver for a time period and checks for the alert frame (see column 5 lines 23-37, claim 15 and figure 5)).

7. Claim 4,6,8-12,14,15 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Medendorp in view of Kim and further in view Tiedemann.

Referring to claim 4, Medendorp discloses a method for controlling power consumption as discussed above. Medendorp does not disclose synchronizing the counter with a counter disposed at the source of the incoming data. However, Tiedemann discloses synchronizing a

receiver with that of the transmitter to which it is connected (see column 4 lines 17-33)). It would have been obvious to one skilled in the art at the time of the invention to perform the synchronization between the source and receiver timers, as taught by Tiedemann, in the system of Medendorp in view of Kim because doing so would prevent timing problems and possible loss of data (i.e. the source would know when the receiver was powered down or not and therefore it would know when the proper time would be to transmit data to the receiver).

Referring to claim 6, Medendorp discloses of a communications device comprising:

a transmitter that transmits data (a transceiver that transmits data (see item 114 in figure 5));

a receiver that receives data over a communications link (a transceiver that receives data from a communications link (see item 114 of figure 5));

a signal processing circuit, coupled to the transmitter and receiver, to prepare data for transmission and to process data received by the receiver (a microprocessor for preparing data transmission and process received data (see item 118 of figure 5)); and

a control circuit, responsive to the signal processor, that selectively powers at least a portion of the receiver down for a period of time (power to a transceiver is turned off for the duration of a sleep timer (see column 5 lines 23-37 and figure 8)) and that powers up the at least a portion of a receiver to check for incoming data when the selected period of time expires (after the sleep timer equals zero the transceiver is powered up and checks for and receives data related to an incoming telephone call (see column 5 lines 23-37 and figure 8)).

Medendorp does not disclose that the portion of the receiver is powered down in response to an indication from the source that data transmission has ended. However, Kim discloses of a

system wherein a receiver powers down when it receives a particular code word from the transmitter which indicates the end of the data transmission (see column 7 lines 3-8)). It would have been obvious to one skilled in the art at the time of the invention to power down the receiver when the source sends it an indication that data transmission has ended, as taught by Kim, in the system of Medendorp because doing so would prevent wasting power (i.e. since the transmission of data has ended there is no need for the receiver to remain fully powered). Furthermore, Medendorp does not disclose synchronizing the counter with a counter disposed at the source of the incoming data. However, Tiedemann discloses synchronizing a receiver with that of the transmitter to which it is connected (see column 4 lines 17-33)). It would have been obvious to one skilled in the art at the time of the invention to perform the synchronization between the source and receiver timers, as taught by Tiedemann, in the system of Medendorp in view of Kim because doing so would prevent timing problems and possible loss of data (i.e. the source would know when the receiver was powered down or not and therefore it would know when the proper time would be to transmit data to the receiver).

Referring to claim 8, Medendorp discloses the system discussed above. Furthermore, Medendorp discloses that the control circuit powers up the receiver to check for incoming data for at least a selected period of time (after the sleep timer equals zero the transceiver is powered up for a period of time and checks for and receives data related to an incoming telephone call (see column 5 lines 23-37 and figure 8)).

Referring to claim 9, Medendorp discloses the system discussed above. Furthermore, Medendorp discloses that the control circuit selectively powers down the at least a portion of a receiver when a selected period of time after power-up has expired or when a signal indicates

that a current data transmission is complete (after a period of time in which an alert frame is not received the timer is reset and the transceiver is powered off (see column 5 lines 23-37 and figure 8)).

Referring to claim 10, Medendorp discloses the system discussed above. Furthermore, Medendorp discloses that the signal processing circuit comprises a signal processing circuit for a cable modem (the processing unit is part of a cable access unit (CAU) (see figures 1 and 5)).

Referring to claim 11, Medendorp discloses the system discussed above. However, Medendorp does not disclose that the powering up of the portion of the receiver comprises powering up in time to allow detection of an attempted retransmission of a packet. However, it would have been obvious to one skilled in the art at the time of the invention to power up the receiver of Medendorp for enough time to detect retransmissions because doing so would allow for proper communication with the source (i.e. if the receiver does not have enough time to detect retransmissions then communications with the source would not take place and the system would not operate properly).

Referring to claim 12, Medendorp discloses of a communications network comprising:

a head end communication device (a cable control unit (CCU) (see the dashed box of figure 1));

at least one remote communication device that is communicatively coupled to the head end communication device (a CAU unit (see item 16 of figure 1)); and

wherein each of the at least one remote communication device includes a control circuit that powers down a receiver of the at least one remote communication device for a selected period of time (power to a transceiver is turned off for the duration of a sleep timer (see column

5 lines 23-37 and figure 8)) and that powers up the receiver of the at least one remote communication device to check for incoming data from the head end communication device when the selected period of time expires (after the sleep timer equals zero the transceiver is powered up and checks for and receives data related to an incoming telephone call (see column 5 lines 23-37 and figure 8)).

Medendorp does not disclose that the portion of the receiver is powered down in response to an indication from the source that data transmission has ended. However, Kim discloses of a system wherein a receiver powers down when it receives a particular code word from the transmitter which indicates the end of the data transmission (see column 7 lines 3-8)). It would have been obvious to one skilled in the art at the time of the invention to power down the receiver when the source sends it an indication that data transmission has ended, as taught by Kim, in the system of Medendorp because doing so would prevent wasting power (i.e. since the transmission of data has ended there is no need for the receiver to remain fully powered).

Furthermore, Medendorp does not disclose synchronizing the counter with a counter disposed at the source of the incoming data. However, Tiedemann discloses synchronizing a receiver with that of the transmitter to which it is connected (see column 4 lines 17-33)). It would have been obvious to one skilled in the art at the time of the invention to perform the synchronization between the source and receiver timers, as taught by Tiedemann, in the system of Medendorp in view of Kim because doing so would prevent timing problems and possible loss of data (i.e. the source would know when the receiver was powered down or not and therefore it would know when the proper time would be to transmit data to the receiver).

Referring to claim 14, Medendorp discloses the system discussed above. Furthermore, Medendorp discloses that each of the at least one remote communication device comprises a cable modem (the processing unit is part of a cable access unit (CAU) (see item 16 of figures 1 and figure 5)).

Referring to claim 15, Medendorp discloses the system discussed above. Furthermore, Medendorp discloses that each of the remote communication device is communicatively coupled to the head end communication device over a communication network (each CAU is coupled to the CCU by way of a communications network (see item 12 of figure 1)).

Referring to claim 21, Medendorp discloses the system discussed above. Medendorp does not disclose that a counter is set at the head end device to the predetermined power down period, thereby synchronizing the counters. However, Tiedemann discloses synchronizing a receiver with that of the transmitter to which it is connected (see column 4 lines 17-33)). It would have been obvious to one skilled in the art at the time of the invention to perform the synchronization between the source and receiver timers, as taught by Tiedemann, in the system of Medendorp because doing so would prevent timing problems and possible loss of data (i.e. the source would know when the receiver was powered down or not and therefore it would know when the proper time would be to transmit data to the receiver).

Medendorp also does not disclose that the portion of the receiver is powered down in response to an indication from the source that data transmission has ended. However, Kim discloses of a system wherein a receiver powers down when it receives a particular code word from the transmitter which indicates the end of the data transmission (see column 7 lines 3-8)). It would have been obvious to one skilled in the art at the time of the invention to power down the

receiver when the source sends it an indication that data transmission has ended, as taught by Kim, in the system of Medendorp because doing so would prevent wasting power (i.e. since the transmission of data has ended there is no need for the receiver to remain fully powered).

8. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Medendorp in view of Kim and further in view of U.S. Patent number 5,440,562 to Cutler, Jr., hereafter referred to as Cutler.

Referring to claim 23, Medendorp discloses controlling power consumption as discussed above. Medendorp does not disclose providing a delay for timing variation between the counters. However, Cutler discloses of a system wherein timing delay is provided in order to accommodate timing variations between to nodes (see column 13 lines 36-41). It would have been obvious to one skilled in the art at the time of the invention to provide a delay in the system of Medendorp, as taught in the system of Cutler, because as Cutler points out in column such delay can prevent drop-outs, gaps, and repetitions that are caused by varying time characteristics.

9. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Medendorp in view of Kim and Tiedemann and further in view of Weston et al. (USPN 5,799,069), hereafter referred to as Weston.

Referring to claim 13, Medendorp discloses the system discussed above. Medendorp does not disclose that each of the at least one remote communication device is powered over the connection between the head end communication device and the at least one remote communication device. However, Weston discloses a communications system wherein a modem

is powered over a phone line (see column 4 lines 20-33)). It would have been obvious to one skilled in the art at the time of the invention to use the method of providing power to remote devices, as taught in Weston, to power the CAU's of Medendorp because doing so would save users of the CAU's the costs of having to power the units themselves, thereby making the system of Medendorp more cost effective for the CAU users.

10. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Medendorp in view of Kim and Tiedemann and further in view of Stifle.

Referring to claim 16, Medendorp discloses the system discussed above. Medendorp does not disclose that the head end retransmits packets when no acknowledgment is received. However, Stifle discloses of a system wherein when a head end does not receive acknowledgments it retransmits the data (see column 10 lines 19-26)). It would have been obvious to one skilled in the art at the time of the invention to implement, in the system of Medendorp, a protocol of retransmitting packets that are not acknowledged, as taught in the system of Stifle, because such a protocol would allow data that might be lost or corrupted during transmission (and therefore not acknowledged) to be retransmitted to the destination, thereby increasing the reliability of the system of Medendorp.

11. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Medendorp in view of Emmermann (USPN 5,740,540), hereafter referred to as Emmermann.

Referring to claim 27, Medendorp discloses the system as discussed above. Medendorp does not disclose that the retransmitted data is a ring signal. However, Emmermann discloses of

a system wherein data retransmissions include a ring signal (see column 3 lines 1-9). It would have been obvious to one skilled in the art at the time of the invention to have the data retransmission consist of a ring signal, as taught in Emmermann, because as Emmermann points out in column 3 line 1, such a signal is very important because it indicates to a user of the system that an incoming call is available.

Response to Arguments

12. Applicant's arguments filed 07/07/2003 have been fully considered but they are not persuasive.

On page 9 paragraph 5 through page 10 paragraph 1, regarding the rejection of claim 1, the Applicant argues, "...nothing in Kim teaches powering down a receiver in response to a code word form the transmitter..." The Examiner respectfully disagrees. The Applicant is reminded that the Examiner is required to interpret the claim language in its broadest interpretation. As such, the term 'receiver' is taken in its broadest sense. Kim discloses that the removing unit, which is part of the receiving end of the system, receives the link shut down control word and goes into a power down mode or idle state. This removing unit receives this data from the embedding unit and is thus a receiver that is powered down. Moreover, even if Kim did not disclose a 'receiver' being powered down, this limitation is anticipated by the primary reference Medendorp.

Also, the Applicant points out, "...Kim does not indicate that the receiver itself is powered down. From the context of Kim, it is more likely that other circuitry associated with the receiver is powered down. In fact, Kim describes another signal referred to as a "power up

code." and "If the power down code turns the receiver off, how would the receiver receive the power up code?" The Examiner respectfully disagrees. As discussed above, Kim discloses that the removing unit is powered down and the removing unit is a receiver and since this unit also powers up from the power up code, it inherently must be able to receive such a signal. Nonetheless, the claimed invention recites "...powering down ***at least a portion*** of a receiver..." Therefore, the Applicant's arguments that "From the context of Kim, it is more likely that other circuitry associated with the receiver is powered down", shows even if only other circuitry of Kim is powered down, this would meet the limitation of 'at least a portion' being powered down.

Lastly, the Applicant argues that Kim enters a "power down mode" or "idle state' when the code is received and that Kim does not further define this state. However, since there are no limitations of the claims that would distinguish the Applicants "powering down" a receiver portion from that of Kim's "power down mode", this limitation is still met by Kim. Furthermore, assuming *arguendo*, it is the view of the Examiner that the definition of these states is self-explanatory.

On page 10, the Applicant argues that "Claim 5 calls for powering up the receiver, checking for incoming data, and, when no data is detected, checking for incoming data without requiring a powering down during this "another selected time period."" The Examiner respectfully disagrees. This is not a limitation of the claim. The claim merely recites "...when no data is detected, checking for incoming data after another selected period of time..." Although Medendorp discloses a repeating process of check for incoming data after powering down and powering up again, there is nothing in the claim to distinguish the invention from this process in Medendorp.

On page 11, regarding the rejection of claim 20, the Applicant contends that the claim is allowable over the prior art for the same reasons that were previously stated in the arguments regarding the rejection of claim 1. The Examiner disagrees with these arguments for the same reasons discussed above.

On page 11 last paragraph and page 12 first paragraph, regarding the rejection of clam 24, the Applicant contends that Tiedemann does not teach or suggest synchronizing the counter at the receiver with a counter at the source of the incoming data to time for substantially the same power down period and that there is no motivation is not shown and there simply is no need in Medendorp for the synchronization discussed in Tiedemann. The Examiner respectfully disagrees. The 'power down period' is disclosed by the primary reference Medendorp (see column 5 lines 23-37). Medendorp does not disclose synchronizing the transmitting and receiving timers. Tiedemann discloses the process of receivers and the transmitters synchronizing their counters (see column 4 lines 17-32). The receiver of Medendorp goes into a sleep mode and data transmitted to the receiver will not be received when in this mode. As such, the receiver can miss data and the transmitters either will not know that the data is missed or some method of recovering the data will have to be invoked by the receiver. Either way, this could be detrimental to the Medendorp system. It would have been obvious to a skilled artisan that if the transmitters and receivers of Medendorp implemented synchronized timers, then they could coordinate when to transmit and receive the data, such that the data will no be missed and a data recovery process does not have to be invoked, thereby preserving system resources. Furthermore, the Medendorp system transfers audio/video (CATV) and voice (POTS) information (see figure 1 and column 1), which require a low transmission delay in order to

maintain quality. Therefore, synchronizing the receivers and transmitters in Medendorp would prevent missing data, which in turn would reduce possible delay conditions and thus help maintain quality. This improvement to Medendorp would have been obvious to one skilled in the art at the time of the invention.

On page 12, regarding the rejection of claim 25, the Applicant contends that the claim is allowable over the prior art for the same reasons that were previously stated in the arguments regarding the rejection of claim 24. The Examiner disagrees with these arguments for the same reasons discussed above.

On page 13, the Applicant contends that the limitation of the claim recites, "...the counter establishes a time period that is sufficient to allow detection of a data packet that is retransmitted...when no acknowledgement is received..." and that there is no teaching in Stifle to this limitation. The Examiner respectfully disagrees. It would have been obvious to one skilled in the art at the time of the invention to power up the receiver of Medendorp for enough time to detect retransmissions because doing so would allow for proper communication with the source and Stifle discloses the acknowledgment aspect of the limitation (see column 10 lines 19-26)). It would have been obvious to one skilled in the art at the time of the invention to implement, in the system of Medendorp, a protocol of retransmitting packets that are not acknowledged, as taught in the system of Stifle, because such a protocol would allow data that might be lost or corrupted during transmission (and therefore not acknowledged) to be retransmitted to the destination, thereby increasing the reliability of the system of Medendorp. Reliability is especially important in Medendorp, because is transfers CATV and POTS data, ads discussed above.

On pages 14-17, regarding the rejections of claim 4,6,8-16,21,23 and 27 the Applicant contends that the claim is allowable over the prior art for the same reasons that were stated in the previous arguments. The Examiner disagrees with these arguments for the same reasons discussed above.

Conclusion

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Odland, who can be reached at (703) 305-3231 on Monday – Friday during the hours of 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou, can be reached at (703) 305-4744. The fax number for the organization where this application or proceeding is assigned is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist, who can be reached at (703) 305-4750.

deo

September 2, 2003

HASSAN KIZOU
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